

International Paper Company v. City of Tomah, United States v. International Paper
Consent Decree for Operable Unit 2

APPENDIX C

**STATEMENT OF WORK FOR
REMEDIAL DESIGN/REMEDIAL ACTION FOR OU2
AT
TOMAH MUNICIPAL SANITARY LANDFILL
MONROE COUNTY, TOMAH, WISCONSIN**

I. PURPOSE

The purpose of this Statement of Work (SOW) is to set forth requirements for the design and implementation of the remedial action set forth in the OU2 ROD, which was signed by the Superfund Division Director, U.S. EPA, Region 5, on September 24, 2003. International Paper shall follow the OU2 ROD, this SOW, the approved RD/RA Work Plan, U.S. EPA Superfund Remedial Action Guidance and any additional guidance provided by U.S. EPA in submitting deliverables for designing and implementing the OU2 remedial action at the Site.

II. DESCRIPTION OF THE REMEDIAL ACTION/PERFORMANCE STANDARDS

International Paper shall implement the RA to meet the performance standards and specifications set forth in the OU2 ROD and this SOW. Performance standards shall include, standards of control, quality criteria and other substantive requirements, criteria or limitations including all Applicable or Relevant and Appropriate Requirements (ARARs) set forth in the OU2 ROD, this SOW and/or the OU2 Consent Decree.

1. Installation and Operation of Monitoring Program for Remedial Action - OU2

A. Groundwater Monitoring

International Paper shall design and implement a groundwater monitoring program as identified in the OU2 RD/RA Work Plan to actuate the Monitored Natural Attenuation (MNA) remedy. International Paper shall utilize the groundwater monitoring program to determine the effectiveness and protectiveness of MNA. To be considered adequately effective, the data must demonstrate that the MNA remedy is reducing contaminant concentrations, that the plume is shrinking, and that groundwater standards will be achieved in a reasonable period of time. If expansion occurs, then contingency actions would be initiated to control and prevent additional plume expansion.

If additional information indicates that the groundwater monitoring program is inadequate, U.S. EPA may require collecting groundwater samples more frequently, installing additional monitoring wells, and implementing additional response actions, such as a groundwater containment or treatment system.

B. Surface Water and Sediment

International Paper shall design and implement a surface water and sediment monitoring program as identified in the RD/RA Work Plan. The surface water and sediment in Deer Creek will be monitored to determine if there is any impact from groundwater discharge. At all times during the performance of the RA, International Paper shall ensure that the surface water and sediment at and adjacent to the Site are not adversely affected by the RA.

If information indicates that the surface water and sediment are being adversely affected by the RA activities, U.S. EPA may require additional response actions.

2. Deed Restrictions

The City of Tomah shall execute and record deed restrictions and covenants as set forth in Paragraph 26 of the OU2 Consent Decree. International Paper shall execute and record deed restrictions and covenants as set forth in Paragraph 27 of the OU2 Consent Decree. The deed restrictions shall prohibit drilling of new wells on land overlying the plume of contamination and using existing wells on land overlying the plume of contamination. International Paper shall use its best efforts to secure the deed restrictions required.

III. SCOPE OF REMEDIAL ACTION - OU2

The OU2 RA shall consist of the following tasks. All plans are subject to EPA approval.

Task 1: Remedial Design/Remedial Action Work Plan

Task 2: Remedial Design Phases

- A. Preliminary Design
- B. Prefinal Design/Final Design

Task 3: Remedial Action Construction

- A. Preconstruction Meeting
- B. Prefinal Inspection
- C. Final Inspection
- D. Reports
 - 1. Construction Completion Report
 - 2. Completion of Remedial Action Report
 - 3. Completion of Work Report

Task 4: Performance Monitoring**Task 5: Operation and Maintenance****Task 1: Remedial Design/Remedial Action Work Plan**

International Paper shall prepare construction plans and specifications to implement the OU2 Remedial Action at the Site as described in the OU2 ROD and this SOW. Plans and specifications shall be submitted in accordance with the schedule set forth in Section IV below. Subject to approval by U.S. EPA, International Paper may submit more than one set of design submittals reflecting different components of the OU2 Remedial Action. All plans and specifications shall be developed in accordance with U.S. EPA's Superfund Remedial Design and Remedial Action Guidance (OSWER Directive No. 9355.0-4A) and shall demonstrate that the OU2 Remedial Action shall meet all objectives of the OU2 ROD, the OU2 CD and this SOW, including all Performance Standards. International Paper shall meet regularly with U.S. EPA to discuss design issues.

Task 2: Remedial Design Phases**A. Preliminary Design**

International Paper shall submit the Preliminary Design when the design effort is approximately 30 % complete. The Preliminary Design submittal shall include or discuss, at a minimum, the following:

- Preliminary plans, drawings, and sketches, including design calculations;
- Results of additional field sampling;
- Design assumptions and parameters, including design restrictions and process performance criteria;
- Proposed cleanup verification methods, including compliance with Applicable or Relevant and Appropriate Requirements (ARARs);
- Outline of required specifications;
- Proposed siting/locations of processes/construction activity;
- Expected long-term monitoring and operation requirements;
- Real estate, easement, and permit requirements;

- Preliminary construction schedule, including contracting strategy.

B. Prefinal Design/Final Design

International Paper shall submit the Prefinal Design when the design effort is 95% complete and shall submit the Final Design when the design effort is 100% complete. The Prefinal Design shall fully address all comments made to the preceding design submittal. The Final Design shall fully address all comments made to the Prefinal Design and shall include reproducible drawings and specifications suitable for bid advertisement. The Prefinal Design shall serve as the Final Design if USEPA has no further comments and issues the notice to proceed.

The Prefinal and Final Design submittals shall include those elements listed for the Preliminary Design, as well as, the following:

- Final Performance Standard Verification Plan;
- Final Construction Quality Assurance Plan;
- Final QAPP/Final H & S Plan/Final FSP/Final Contingency Plan;
- Draft OU2 Operation and Maintenance Plan;
- Capital and Operation and Maintenance Cost Estimate. This cost estimate shall refine the FS cost estimate to reflect the detail presented in the Final Design;
- Final Project Schedule for the construction and implementation of the Remedial Action which identifies timing for initiation and completion of all critical path tasks. The final project schedule submitted as part of the Final Design shall include specific dates for completion of the project and major milestones.

Task 3: Remedial Action Construction

International Paper shall implement the OU2 RA as detailed in the approved OU2 Final Design. The following activities shall be completed in constructing the OU2 RA.

A. Preconstruction inspection and meeting:

International Paper shall participate with the U.S. EPA and the State in a preconstruction inspection and meeting to:

- a. Review methods for documenting and reporting inspection data;

- b. Review methods for distributing and storing documents and reports;
- c. Review work area security and safety protocol;
- d. Discuss any appropriate modifications of the construction quality assurance plan to ensure that site-specific considerations are addressed; and,
- e. Conduct a Site walk-around to verify that the design criteria, plans, and specifications are understood and to review material and equipment storage locations.

The preconstruction inspection and meeting shall be documented by a designated person and minutes shall be transmitted to all parties.

B. Prefinal inspection:

Within fifteen (15) days after International Paper makes a preliminary determination that OU2 RA construction is complete, International Paper shall notify the U.S. EPA and the State for the purposes of conducting a prefinal inspection. The prefinal inspection shall consist of a walk-through inspection of the entire Site with U.S. EPA. The inspection is to determine whether the project is complete and consistent with the contract documents and the OU2 RA. Any outstanding construction items discovered during the inspection shall be identified and noted. Additionally, treatment equipment shall be operationally tested by International Paper. International Paper shall certify that the equipment as tested has performed to meet the purpose and intent of the specifications. Retesting shall be completed where deficiencies are revealed. The prefinal inspection report shall outline the outstanding construction items, actions required to resolve items, completion date for these items, and a proposed date for final inspection and can be in the form of a punch list or letter.

C. Final inspection:

Within fifteen (15) days after completion of any work identified in the prefinal inspection report, International Paper shall notify the U.S. EPA and the State for the purposes of conducting a final inspection. The final inspection shall consist of a walk-through inspection of the Site by U.S. EPA and International Paper. The prefinal inspection report shall be used as a checklist with the final inspection focusing on the outstanding construction items identified in the prefinal inspection. Confirmation shall be made that outstanding items have been resolved.

D. Reports

1. Construction Completion Report - OU2

Within thirty (30) days of a successful final inspection, International Paper shall submit a Construction Completion Report. In the report, a registered professional engineer and International Paper's Project Coordinator shall state that the OU2 RA has been constructed in accordance with the design and specifications. The written report shall include as-built drawings signed and stamped by a professional engineer. The report shall contain the following statement, signed by International Paper's Project Coordinator:

"To the best of my knowledge, after thorough investigation, I certify that the information contained in or accompanying this submission is true, accurate and complete. I am aware there are significant penalties for submitting false information, including the possibility of fine and imprisonment for knowing violations."

2. Completion of Remedial Action Report - OU1 and OU2

Within 30 days of completion of all Remedial Action (both OU1 RA and OU2 RA), including attainment of all performance standards, International Paper shall submit a Completion of Remedial Action Report. In the report, a registered professional engineer and International Paper's Project Coordinator shall state the Remedial Action has been completed in full satisfaction of the requirements of the OU1 and OU2 Consent Decrees. The written report shall include as-built drawings signed and stamped by a professional engineer not previously submitted. The report shall contain the following statement, signed by a responsible corporate official of International Paper or International Paper's Project Coordinator:

"To the best of my knowledge, after thorough investigation, I certify that the information contained in or accompanying this submission is true, accurate and complete. I am aware there are significant penalties for submitting false information, including the possibility of fine and imprisonment for knowing violations."

3. Completion of Work Report - OU2

Within 30 days of completion of the Work, including operation and maintenance, International Paper shall submit a Completion of Work Report. In the report, a registered professional engineer and International Paper's Project Coordinator shall state the Work has been completed in full satisfaction of the requirements of the OU2 Consent Decree. The written report shall include as-built drawings signed and stamped by a professional engineer not previously submitted. The report shall contain the following statement, signed by a responsible corporate official of International Paper or International Paper's Project Coordinator:

"To the best of my knowledge, after thorough investigation, I certify that the information contained in or accompanying this submission is true, accurate and complete. I am aware there are significant penalties for submitting false information, including the possibility of fine and imprisonment for knowing violations."

Task 4: Performance Monitoring

Performance monitoring shall be conducted to ensure that all OU2 Performance Standards are met.

Performance Standard Verification Plan

The purpose of the Performance Standard Verification Plan is to provide a mechanism to ensure that both short-term and long-term Performance Standards for the OU2 RA are met. The approved Performance Standards Verification Plan shall be implemented on the approved schedule. The Performance Standards Verification Plan shall include:

1. Quality Assurance Project Plan
2. Health and Safety Plan
3. Field Sampling Plan

Task 5: Operation and Maintenance

International Paper shall prepare an Operation and Maintenance (O&M) Plan to cover both implementation and long term maintenance of the OU2 RA. An initial Draft O&M Plan shall be submitted as a final Design Document submission. The final O&M Plan shall be submitted to U.S. EPA prior to the pre-final construction inspection, in accordance with the approved construction schedule. The plan shall be composed of the following elements, as necessary:

1. Description of normal operation and maintenance ;
 - a. Description of tasks for operation;
 - b. Description of tasks for maintenance;
 - c. Description of prescribed treatment or operation conditions; and
 - d. Schedule showing frequency of each O&M task.
2. Description of potential operating problems;
 - a. Description and analysis of potential operation problems;
 - b. Sources of information regarding problems; and

- c. Common and/or anticipated remedies.
3. Description of routine monitoring and laboratory testing;
 - a. Description of monitoring tasks;
 - b. Description of required data collection; laboratory tests and their interpretation;
 - c. Required quality assurance, and quality control;
 - d. Schedule of monitoring frequency and procedures for a petition to U.S. EPA to reduce the frequency of or discontinue monitoring; and
 - e. Description of verification sampling procedures if Cleanup or Performance Standards are exceeded in routine monitoring.
 4. Description of alternate O&M;
 - a. Should systems fail, alternate procedures to prevent release or threatened releases of hazardous substances, pollutants or contaminants which may endanger public health and the environment or exceed performance standards; and
 - b. Analysis of vulnerability and additional resource requirement should a failure occur.
 5. Corrective Action;
 - a. Description of corrective action to be implemented in the event that cleanup or performance standards are exceeded; and
 - b. Schedule for implementing these corrective actions.
 6. Safety plan;
 - a. Description of precautions, of necessary equipment, etc., for Site personnel; and
 - b. Safety tasks required in event of systems failure.
 7. Description of equipment; and
 - a. Equipment identification;
 - b. Installation of monitoring components;
 - c. Maintenance of Site equipment; and
 - d. Replacement schedule for equipment and installed components.
 8. Records and reporting mechanisms required.

- a. Daily operating logs;
- b. Laboratory records;
- c. Records for operating costs;
- d. Mechanism for reporting emergencies;
- e. Personnel and maintenance records; and
- f. Monthly/annual reports to State agencies.

IV. MAJOR MILESTONES /SCHEDULE

International Paper shall adhere to the following schedule for performing tasks and submitting reports required by this SOW:

<u>Submission or Tasks</u>	<u>Due Date</u>
1. Remedial Design/Remedial Action Work Plan	Thirty (30) days after entry of the OU2 Consent Decree
2. Preliminary Design (30%)	Sixty (60) days after U.S. EPA's approval of the Final RD/RA Work Plan
3. Draft Performance Monitoring	Thirty (30) after submittal of Preliminary Design
4. Prefinal Design (95%)	Sixty (60) days after receipt of U.S. EPA's comments on the Preliminary Design.
5. Final Design (100%)	Thirty (30) days after receipt of U.S. EPA's comments on the Prefinal Design.
6. OU2 RA Construction	Thirty (30) days after approval of the Final Design.
7. Prefinal Inspection	No later than fifteen (15) days after completion of construction.
8. Prefinal Inspection Report	Fifteen (15) days after completion of prefinal inspection.
9. Final Inspection	Fifteen (15) days after completion of

work identified in prefinal inspection report.

10. Final O&M Plan

No later than prefinal inspection.

11. Construction Completion Report - OU2

Sixty (60) days after final inspection.

12. Remedial Action Completion Report - OU1 and OU2

Thirty (30) days after completion of all Remedial Action

13. Completion of Work Report - OU2

Thirty (30) days after completion of the Work.